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LEADING ARTICLES

THE DISPOSITION OF CRIMINAL EPILEPTICS—WILL MISSOURI CONTINUE TO JUDICIALLY MURDER THEM AND KANSAS TO SENTENCE THEM TO DEATH?—A SEVEN YEARS STUDY OF THREE MEN WHO MURDERED ELEVEN PEOPLE—(ILLUSTRATED).*

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The general sentiment is to tolerate no act of a criminal or immoral character by any person who is not of your own flesh and blood; should the actor be of your house a fortune would be fragmented to invoke the clemency of the law, written or unwritten.

Persons suffering from epilepsy have been no exception to the rule. Since the days of Biblical history† the epileptic has been with us to remain till the completion of Biblical prophecy. This being true should we in this bombastic era of intellectual development continue to treat him as a criminal because he possesses an unstable brain, habituated to periodical explosions during which he has no conscious control over his acts?

The very fact that the prisoner at the bar is an epileptic is frequently the signal for legal persecution by the prosecution and even many of the lay people; the crime of an epileptic is ordinarily so overwhelmingly atrocious, blood curdling and unpardonable that

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vengeance seems his just reward—and he usually gets it.

Therefore, every state enforcing capital punishment has executed its quota of epileptics; legalized murder for the sole reason that the victim had no choice in the selection of his parents.

From a business standpoint, setting sentiment aside, the most useless disposition of the average criminal is to execute him. If we must propagate epileptics it is only human to care for them. If we must execute them do it before they are born: Castrate the great grandfather or colonize them and illegalize any civil procedure leading to reproduction. Such restrictions on the living would be Christian kindness compared with crime committed unconsciously and punished by death.

The germ of danger resides in the brain of every epileptic and no one is wise enough to

*Read before the Jackson Co. Medical Society October 15, 1907.

†St. Luke, 9; 39:—"And lo a spirit taketh him and he suddenly crieth out; and it teareth him that he foameth again, and bruising him hardly departed from him."

compute the time or intensity of the mental explosion nor reckon its disaster.

Approximately there are 142,000 epileptics in the United States. Some 15% of this number, 21,300, are insane and violently dangerous citizens. According to asylum authorities 65% of our epileptic population or 92,300 persons, have undergone psychic degenerative changes. In the facts of these cold statistics is it any wonder that there is an occasional newspaper sensation; that the court gets busy and the sheriff takes a play at practice with the trap of death? Because the epileptic appears before the court in his lucid state the court presumes that he knows no other mental status. Competent evidence offered to the contary is usually ignored, treated as a joke or received with contempt. Did he know right from wrong? That's the question; that's all the court wants to know. From the lucid appearance of the individual the lawyers, jury and the court presume that he did. Ignorance personified. The most careful study for years is required to determine when these epileptics are in their natural mental understanding or in that subconscious mental state where they don't know; where they do not understand; where the whole mind comprehension is a confused blur and the after waking leaves their acts blank. Yet in this mental state they walk, they talk, they act, on the surface much like other people (excepting when the subconscious mental status becomes an unconscious delirium, attended by the most furious and destructive delusions and hallucinations with an impulse to kill.)

For instance, an able editorial writer stepped out of the St. Dennis Hotel at 10th St. and Broadway, New York for a little walk and his next conscious memory found him at 42d st. with absolutely no knowtedge of his intervening acts. How he reached 42d St. he did not know; he was walking when his memory departed and still walking when it returned. Had he been disturbed he might have killed a dozen people with no knowledge of his acts. Had he killed any one would the court have believed him when he, with his intelligence, told the court it must be a mistake for he had no memory of committing the act? Believe it? Never, in a hundred years!

Again this same gentleman left an unfinished editorial on his desk (in this city), put on his coat and walked five blocks to our city hall, met and talked with people, as proven by investigation, returned to his office in an hour or so, walked up to the his desk, looked at the unfinished editorial and asked his assistant; "whose stuff is that?" "Yours" came in reply. "Not by a—sight" he answered. He leisured about the office another half hour took off his coat, sat down at his desk, commenced writing where he had left off and finished the editorial without knowledge of his intervening digression. Had he committed a criminal act on this trip and told the truth of his memory failure to a little dessicated judge with a hypertrophied ego would the judge have believed him? Never in a thousand years!

A farmer in my sanitarium at this writing had, at 8 and 9 years of age, frequent, so called, "worm spasms". They came on at night in his sleep but were soon over when he would go to sleep and sleep till morning without knowledge of having had an attack. During his teens he carried off things of little value three times and made no defense in court; he did not seem to understand just how it happened but he was not believed of course. From 19 to 22 years of age he found himself on the ground at intervals as if he had been asleep and his muscles would feel sore and stiff. He was unsettled in business relations and would roam from place to place and finally came home when 22 years of age, bringing a wife with him. Even his marriage was clothed in mystery. He took charge of the farm at this time and conducted it successfully but at times his disposition was stormy; other times gentle and kind. A year later he took his gun for a rabbit hunt and did shoot three rabbits. A young woman driving alone on the highway was horror struck to see a man suddenly grab at her horse. She did not see him till he was clamoring at the buggy. He was breathing heavily, she explained, and looked as if he had been running till exhausted. He climbed into the buggy with the gun in one hand and as she screamed, clawed her veil and struck and scratched her face with the other hand, commanding silence or he would kill her. He made no further efforts to harm her but seized the lines and turned the horse down a seemingly impassable enbankment, through an open gate into an open pasture and drove rapidly for a quarter of a mile. As suddenly as he appeared on the scene and seized the horse, he now stopped the horse, looked at the girl with a picture of horror and exclaimed; "Why Lulu is it you?" "My God what have I done"? turned the horse, drove back to the road lamenting his conduct, apologized for his actions and got out of the buggy. (This is the exact explanation related by the young woman.)

That evening, three hours later, the young man found himself at work repairing the chicken house, the first memory he had of himself since shooting a rabbit about half past two in the afternoon. The next day,

while following the plow, he found himself lying in the furrow with the lines wrapped around him where he had fallen in a fit while walking.

Had he killed the woman in his first struggle with her and the crime charged to him, would the judge or jury have believed the story that he was unconscious and did not remember the act? Never! Never in ten thousand years. And the fact is he has absolutely no knowledge of what he did. The young woman relates the facts; he can not. He will not be prosecuted, because the people and girl have all known him from his boyhood and know that only irresponsibility explains matters—that's all that saved him from mob violence or the court's jurisdiction.

Deprived of his liberty, I have kept him under constant observation day and night and have been able to see him in several attacks of psychic epilepsy with an occasional grand mal seizure.*

To further accentuate the facts related in this common class of cases, at the expense of being tedious, I beg to present a seven years' study of three harmless(?) epileptics who murdered eleven people:

Convict No. 8991.—Under sentence of death from Kansas. Admitted June 15th, 1899; examined by me May 6th, 1900. He had been confined as insane in the Insane ward since his admission, eleven months ago.

Personal History.—Fifty-nine years old; male; farmer; married at 39 years of age. Claims a sunstroke at one time, attended by unconsciousness. He had epileptic grand mal convulsions from childhood about monthly, but had dizzy spells without loss of unconsciousness very often.

At one time he had a spell of delirium and violence and tried to injure others with a knife. Had no memory of his act for four days. Was confined to bed eight days. The physician claimed his brain was affected. He suffered severe vertex and base pain on recovering consciousness, and says he has seldom been free from this pain since, with increased vertigo. The vertigo is attended by a daze, inability to speak and heart palpitation. Eighteen months ago he fell twenty feet when dazed, lighting in some machinery and striking right kidney region; he has passed blood in urine ever since; the clothing is now blood-stained.

Family History.—His father and three sisters had epilepsy. One sister died in an attack. The prison physician, Dr. Grigsby assures me that there is epilepsy on the mother's side, also. Domestic History Related by Convict No. 8991.—He claims he caught a man sharing apartments of his wife and daughter; that the latter confessed its truth after a stormy interview. Also that two other men were equally guilty. One of the men threatened to kill the present convict when accused, but disputed same on the stand. Later the daughter had a child by this man and then married him.

Finally No. 8991 claimed his wife drove him from home so the man could remain at the house undisturbed. Their son threatened to shoot him if he did not go. He went to another town and stopped with relatives two days. While there he paid seventy-five cents at a street sale for a revolver. The

* He has since been given his liberty by his friends, and I am patiently waiting to hear of him in the hands of the law, possibly to answer the charge of murder. Not this year nor next year, perhaps, but it will happen if he lives till the opportunity presents itself. With all possible elements of murder in his heart during these attacks his friends knowingly allow him to jeopardize the lives of others for sentimental reasons.

morning of the third day he met his wife at the depot waiting to go home from this same town, where she had been to file suit for divorce.

On the train he found her sitting in a seat in front of him. She threatened him with arrest unless he left the train, and said a mob was waiting for him at their home town. He gave his ticket to the conductor and went to the smoking-car. This is the last memory of his acts from Thursday morning till the next Saturday afternoon when he located himself in the hospital.

The prosecution claimed that in leaving the train the husband and wife met on the platform between the two cars and that the husband immediately shot and killed her. "He then intended" to shoot himself but missed. "He then fell down and shot the revolver once more, pretending to shoot himself, but missing some six inches;" that he was approached by men; that he "beat himself on the forehead" with a "coupling pin;" that he was tied by a constable and held three or four hours till officers arrived.

My personal examination showed a cicatrix along the longitudinal suture representing what had been a severe wound, said to have been made with the coupling pin.

The prosecuting "evidence showed that No. 8991 had suffered all his life from epilepsy;" that "neighbors and friends had seen him have a fit once a year, perhaps; "relatives testified that he had them frequently." The prosecution adds: "the judgment was that he had not suffered from fits oftener than once a year," an honest judgment, perhaps, based on what was not known.

"With one exception, his neighbors testified for the state that he was of sound mind" and "knew right from wrong; that he some times acted strange or peculiar; that he was able to farm when he was not too lazy to drive a team or transact ordinary business;" that he did conduct a farm as a poor, shiftless farmer.

The prosecution claimed that the prisoner had three "*purported* fits" while in jail sixty days; that "at the trial he had two *purported fits;*" that three physicians testified they had the "appearance of epileptic fits," but in their judgment they were brought on by himself *purposely* and *intentionally;* that also his own daughters testified that "he was not a good father." He was sentenced to hang.

The prosecution admitted that he was not a strong minded man nor intelligent, but that "he knew right from wrong and the moral effects of his acts at the time he killed his wife, and claimed that he "deliberately executed his plan" to kill his wife; that he knew "what defense he would try to plead;" that he was sufficiently smart to carry out his plan to invoke executive clemency by reason of his alleged epilepsy."

The fact is he had no plan to invoke executive clemency when I examined him, eleven months after imprisonment. From the time of admission he was confined in the insane ward as a lunatic. He was physically frail. He had the thick clubbed facial features of a chronic epileptic. He had the causeless sadness of melancholia reflected in his expression. His ideas were simple, often silly, and his thought showed a vague confusion which, to an expert, illuminated the shadow lines of delusion, lingering on the borderline of the subconscious memory state. In other words, he presented the imbecilic form of epilpetic insanity. As shown in his picture, No. 8991, he had a bilateral convergent strabismus.

The report of Dr. Grigsby, physician-in-charge, showed frequent convulsions, confused memory states, but otherwise very truthful and good conduct.

The foregoing, summarized, shows these preponderating predisposing and exciting causess of mental degeneracy and mental unsoundness prior to the homicide:

1st. Epilepsy in both families of his ancestry.

2d. He had epileptic convulsions all his life.

3d. He was shiftlessly incompetent in the affairs of life.

4th. A sunstroke attended by unconsciousness.

5th. A period of unconscious delirium when he tried to kill with a knife and was confined to bed eight days.

6th. His ugly intolerable temper disposition toward his faimly, culminating in his being driven from home under penalty of death, and the wife filing a divorce.

7th. The mental exasperation occasioned by the easy virtue of the wife and three daughters, whether it was a delusion or a fact; he claims an illegitimate child was born to one daughter.

Through personal efforts and the kind assistance of Dr. Grigsby, who has had continuous charge of the convict, I am able to present a seven years' study of his case subsequent to being sentenced to hang.

On admission, as stated, he was confined to the insane ward. He had continued convulsive attacks and mental incompetency for sixteen monhs. At this time Dr Grigsby bled him, taking one pint of blood after which he had fewer attacks. Bleeding was continued every forty to sixty days with cessation of attacks and improvement to the extent of putting him to attend the door. He shortly complained of abdominal pain to the left of the

median line and two inches below the umbilicus. Examination warranted opening the abdomen; a piece of bailing wire seven inches long was removed. He swallowed it with suicidal intent before his conviction of crime more than two years before.

The wire had miraculously escaped from the alimentary tract and was burrowing into the abdominal wall at the time of the operation. For the next five years his general health was better and so far as known he had but five convulsions. Of course he may have had convulsions at night without the fact being known. After the operation he again attend the door, continuing at this duty five years, or to the end of our seven years' observation.

After the apparent decrease in the number of convulsions and the cessation of the mental excitability of his former life, the mental enfeeblement greatly increased, mingled with childish acts and delusional vagaries. For instance, he firmly believed in the preservation of bodily vigor and even controlling of certain physiological functions by wearing a series of rings. So positive is he in this belief that he has mutilated his ears to the extent of wearing large brass rings in them, to preserve his eye sight. On all his toes, excepting the great toes, he wears an assortment of rings. Before retiring at night, regularly and faithfully, he removes each toe ring, goes through sort of a chanting prayer as to his hopes and faith in their saving and protecting powers and again replaces them to be worn till the next night. So strong is his faith in these rings that all a man needs to do to control the physiological functional manifestation of the ungratified reproductive organs is to wear a ring at night, the most active period in the twenty-four hours he thinks; this he has used successfully a long time. But a short time ago things changed; the charm was lost. Some mysterious and evil agency had erupted his mastery over the lascivious in the night; and while the mechanic removed his jewelry with a file in the small hours of the morning the twilight saw his long existing affirmative delusion, shredded and torn asunder only to be replaced by equally as fixed a negative delusion.

Extreme mental enfeeblement and childish imbecility is now common to his daily act though he is honest, truthful and obedient. He sits hour after hour making embroidery work out of twine. He also makes doll clothes for a small doll made from the slate of the mine and given to him. He made a small box with a glass front for the doll and keeps it constantly where he can see and watch over it. These acts indicate his mental limitations at the end of seven years daily observation.

No. 8869.

Family History.—The grandfather and grand-uncle settled in Kansas in the early sixties. They both had a family history of larceny to the extent that the grand-uncle was induced by the citizens to leave the country hurriedly. While the grandfather was not banished he was deemed equally guilty in participating in many small crimes with his brother.

The father of the prisoner farmed in the community from early manhood to within ten years of the crime. "He was a man of violent temper and intemperate habits." Though not confined as a lunatic, some eighteen years before the crime, his family believed him insane and to the present knowledge of my informant the wife lived in deadly fear of him a long time.

Prisoner's Personal History.—As a school boy he was quarrelsome and morose. His chief amusement was to get small boys into quarrels and fights and complacently watch their contention. He was notorious for getting others into fights and keeping out of them himself. He was married ten years prior to the tragedy. He was a tenant farmer, always behind in his work and his farm property, horses, implements and crops were usually mortgaged. Thus his incompetent shiftlessness increased his financial burdens progressively. He occasionally drank, but was not a drunkard. He was not drinking at the time of the crime. He had four children, the youngest about one year old.

The Tragedy.—The details are only known as voluntarily related by the prisoner. In doing so his expression of the most horrifying facts were gone over with as little display of emotion or concern as if the whole matter was a common place incident. The most urgent attempts to obtain a reason, "even an insane reason," for his act was in vain. He said he got into some sort of a discussion with his wife. "He could not or would not tell what it was about." During the talk a strange feeling came over him; he could not understand it, and with this strange feeling on him he seized a hammer at hand and struck the sleeping babe with it. The wife grappled with him and they struggled out of the door, she screaming, when he struck her with the hammer. "Having struck her once he kept striking her till she ceased to struggle," and then carried her in the house. The remaining three children were making a noise which he stopped by a free use of the hammer. In this way he killed his wife and four children.

Though not always told the same this is substantially his version of the crime. At times he said he did not remember the murder, and in the next breath he would proceed to give some of the horrible details.

Several days after the crime he was arrested some sixty or seventy miles away, riding on horseback. He employed no attorney and was defended by attorneys appointed by the court. He was lingeringly vacillating whether to plead guilty or not guilty. He thought to plead not guilty if the chances were favorable to him and he pleaded not guilty; but he had a fear of mob violence and changed his plea to guilty. While under arrest, to the lay observer, his only mental aberration showed in a fear and his forgetfulness.

quiet, moral, rural community, remote from dissipation and inducement to crime; reared in the open fields of godly sunshine into which the Supreme Artist dashed the tinseled tints and golden hues to make radiant the album of life, the leaves of which we love to turn in the reveries of e'entide and view the daguerreotyped shadows matured into world powers; reared in Nature's sea of developmental possibilities, standing, as it were, in the midst of the rose garden of parent-hood, the acme of all life, he, in a causeless fury, smote his innocent flesh and blood and annihilated all his earthly own. The law reasons such an act to be naught but crime, the conclusion being based on man made facts. Medicine contends there are no facts without developed, tangible, co-ordinated reason and

It was conceded that "he was a moral degenerate by heredity and training" and entirely void of any moral sensibility.

The general legal bearing of the crime was that he committed murder merely because his wife and children were a burden to him and were, for the time, annoying him. So, with only circumstantial evidence, other than his reversal of his plea of not guilty, he was sentenced to hang. Collectively these inconsistencies should be compared with the following:

First. That his grandfather and grand-uncle were criminals.

Second. That his father was insane and regarded as dangerous for a long time by the family.

Third. That his greatest sin was his inability to do anything well; totally incompetent to enact judgment mentality to meet the responsibilities of life; a failure in all earthly duties except to reproduce his specie; that the young man was reared and trained in a

that there is no such reason in the absence of a God made brain, therefor, a million legalized murders will never correct the creative error. Had the law kindly incarcerated, hung or castrated the prisoner's criminal grandfather further proceeding would have been unnecessary to cure a sick brain in the grand-son by sentencing him to be hung.

My personal examination of the prisoner was made June 6th, 1900, fourteen months after commitment to the penitentiary. The records record his age as 25 years; he tells me he is 36 years old and was married at the age of 26 years; he looks to be all of 36 years of age.

His Statement.—Says he was well till three years ago when he gave out in taking the straw from a threshing machine; he got very hot, turned suddenly dizzy and could see nothing but an atmosphere of stars. Was not able to be out for ten days. Subsequently he had repeated dizzy, dazed attacks and would see nothing but stars. At times

his memory failed for periods. This was made known to him by proof of things he did without knowing he did them. For instance, he renewed a note before it was due and gave an unnecessary note without knowing he did it. Various other acts to his detriment were cited which convinced him of his own acts which he did not remember. Later he had a roaring in his head, he was sleepless, had strange fears and feelings and thought he was going crazy. He started in the night to go to his folks to escape his overwhelming fear, and his wife told him he was crazy and prevented his going; he is sure he heard two men outside talking of sending him to the asylum. He could not work and he kept away from all neighbors who were talking and making plans about sending him to the asylum. He was afraid to go down town because voices told him he would be captured and be killed if he refused to go to the asylum. Often "a flash was thrown over" him so he could see nothing but the stars. He saw a horseman going by to get an officer, and he knew if he remained home he did so at the risk of his life; he started to escape to his uncles, but on the way got afraid to go further and turned back home. On reaching home he was afraid to go in because his wife had planned to have them hang him. Thinks he finally went in his house and went to bed, but was too frightened to sleep.

After that and for the months of February and March everything seems vague and dream-like. He don't remember the court proceeding, whether he pleaded guilty or not. He cannot be convinced now that his wife and children are dead. Since being in prison he still has dizzy spells and loses memory of his work for the time.

During the examination he views everything with suspicion and fear, and presents marked delusion of persecution. His insanity is of the systematized persecutory, delusional type with periods of memory loss as well as mental confusion—probably a psychic epileptoid manifestion. The accompanying picture illustrates his appearance well.

From my examination, May 6th, 1900, to January, 1900, the prisoner worked in the coal mines. In time he showed skill in taking up brakes (caved in places) and was used as an expert in that work. In January, 1904, he requested Dr. Grigsby to take him from the mines and give him a team to drive. Dr. Grigsby took him from the mines and put him to cracking rock, as he saw he was failing mentally. He would report at sick call with a silly, good-natured grin. When asked if he were sick he would say "no," and request to go out on the farm. When refused he would say "all right," and go to the next officer with the same grin and same request, he would meet refusal and continue to the next officer with the same grin and same request. This he kept up till he became a nuisance, and was locked in his cell. After being in his cell several days Dr. Grigsby would visit him and find him grinning good-naturedly. He would ask why he was locked up and promise to go to work and not bother any more. Again sent to work he would leave without permission and run grinning to the first officer and ask for a job some place else. This continued till April, 1907, when he was necessarily confined in the insane ward till Spetember, 1904. The first two months in the insane ward he was very restless, ate but little, was always grinning and asking for a job; was obedient, but his obedience was for the moment only; if reprimanded he would grin, promise to obey, and in ten minutes would come grinning with the same question over again.

The third month in the insane ward he grinned less and improved much, and later he seemed good for another winter's work in the mines. Finally, for the first time since leaving the mines, he asked to return there for work. His improvement warranted granting his request. The first day he worked well. The second day he worked till noon. In the afternoon he sat in the door of his room in the mine. When asked if he was going to work he would say, "right away." That evening he was missing. The mines were searched for seven days and nights. The middle of the seventh night a searcher heard a feeble voice calling "Come get me." He had gone to an abandoned closet which had been dumped with lime and walled off. He had removed enough stone to allow him to crawl through the wall and then replaced the stones so nothing could get to him. When removed from the mine he was unconscious and remained so until he died, two days later.

Dr. Grigsby who had medical supervision of him all the time, tells me that he never talked of his trouble, and never mentioned his family which he was accused of killing. He never read anything. When visited in his cell he was always found with his hands in his lap, meditating and staring into space. When spoken to he always grinned and replied good naturedly. At one time when doing good work in the mines as an expert he told Dr. Grisby that he was afraid to go to the mine. The doctor lays special stress on the prisoner's bad memory, which became very bad prior to his removal to the insane ward. He believes if there ever was

any retained memory of the crime that it was entirely lost.

When I examined him his last memory was when his insane fears and delusions caused him to seek safety at his uncle's; but he got afraid before he reached his uncle's and returned home and was afraid to enter his home after returning, he fearing that his wife had joined the neighborhood conspiracy to kill him, but he thought he finally did so, and retired, but was too frightened to sleep. This is the night the family was killed. His leaving the home on horseback, his arrest several days later, the court proceedings and all events for the months of February and March were to his memory only incoordinated dreamy fragments. He told me he was sure they arrested him in Topeka when in fact he was at or near Emporia, Kansas. He fully believed he was arrested because he rode a mortgaged horse, and was escaping from those conspiring against his life, including his wife. He firmly disbelieved the story of the death of his family. As Dr. Grigsby's constant observation of him shows up to the time of his death, there was no indications that he ever had any memory of the tragedy; that his memory was continuously punctuated with blots and ended in an atypical form of dementia, and finally death.

With all these clinical facts I decline to change my diagnosis, namely, the psychical epileptoid type of insanity existing before, during and after the tragedy to the time of his death.

HISTORY AND EVIDENCE OF THE CRIME OF CONVICT NO. 8905.

The tragedy occurred in the south room of a two-room house. This room had a south and west window. The west window had no blind to cut off the full view of a window facing it in an occupied house twenty-five feet distance.

The prisoner is very illiterate and very poor, financially, but undisputed evidence showed him to have been a hard-working, industrious man of good habits. That he was a fond father and a good husband; that on the evening of May 19th, 1899, his wife went to a neighbor's where she intended to work the next day. The husband did not object, but "hated" to have his wife go out to work. He remained home with their five children, aged respectively 3, 6, 8, 10, 12 years.

Two o'clock the next morning the prisoner, dresed in just a hat, shirt and trousers stood pounding on the back door of the adjoining cottage calling for help. He said the house was on fire and the children were in it. He was very much excited and acted as if nearly suffocated from the smoke and was weeping. The flames were seen just emerging from the east side of the south room, opposite the mentioned west window, and the cottage twenty-five feet away. The fire seemed to have originated in a closet in the east side of this south room, and at this time had made but little progress into this room.

The prisoner retreated a step or two from the door he had been pounding toward his own home. He paused, continued weeping and was seen by the fire-light to draw a bloody handkerchief from his pocket and wipe his face. When asked the location of the children he could not tell, but stood there till the house was about consumed and then went several blocks to his father-in-law's, weeping, complaining of his head and told what had happened.

After extinguishing the fire the charred bodies of the five children were found on a pallet in the northwest corner of this south room, on the side next to the neighbor's cottage, and on the opposite side of the room from where the fire started in the closet. Three of the children lay with their heads to the west and two with their heads to the east, all facing the north and the feet of both groups together.

Each child had been struck with a blunt instrument with sufficient force to fracture the skull. In some the fracture was on the under side of the head and in the others it was on the upper side as they were positioned when found. This fact was interpreted as evidence of the children first having been killed and aferward placed as found.* However, in addition to the skull fracture three children had their throats cut, and the youngest child had a stab wound in the throat penetrating the cervical vertebrae.

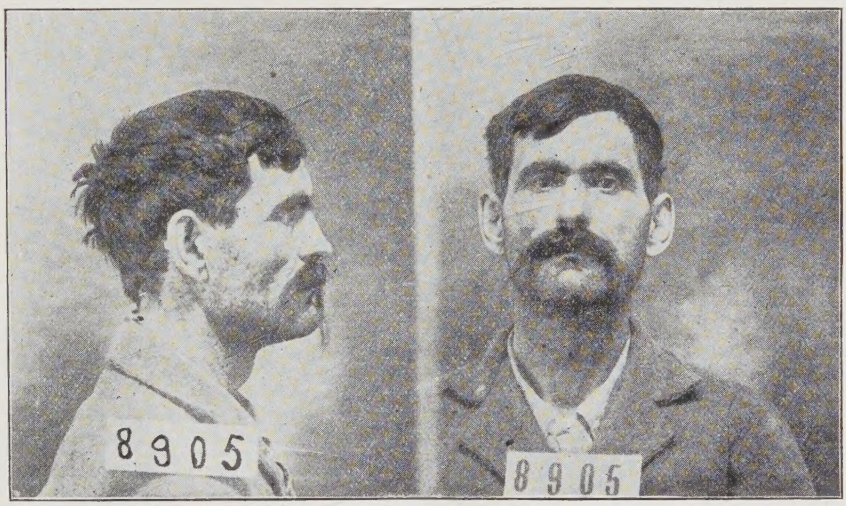
The prisoner disclaimed any knowledge of the crime. Instead, after seeing the children to bed on the pallet on the floor in the positions in which their bodies were found as described, he went to bed in the north room at 9 o'clock and slept till awakened by the smoke and fumes of the fire bursting into his room from the children's room. He says he was nearly suffocated and rushed out of the room. He stood out doors some fifteen minutes, and believing he could not get to the children on account of the fire he gave the alarm. The evidence showed, however, that at this time the flames were emerging from the closet on the east side of the children's room and that the fire had not made much progress to the

*Any animal of small body weight, if struck a fatal blow, may change its position many times before actually dead. A chicken may jump all over the yard after its head is severed. That five children could die of a blow on the head without some of them changing position in the death struggle would be contrary to all reason, excluding the conclusion of a legal tribunal devoid of a new thought since the McNaughton case 200 years ago.

west side of the room where the children were found. Testimony showed that he had had spells for ten years, but had not attempted to harm himself or others. He had the "spells" at night ten or twelve times a year. A physician who saw the "spells" said they were epileptic fits; that he had had them at night; the warning of their approach was a dizziness or heavy feeling in the head; that he bit his tongue and lip, frothed at the mouth, rolled his eyes and was convulsed during the paroxysm; that it lasted a few minutes, when he became quiet, but remained unconscious; that in "30 to 50 minutes" he would appear to "become conscious but would lie down and sleep an hour or two, and on waking" did not know anything had happened, except that he would feel a soreness in his limbs.

of night convulsions, only as told him for ten years, but that he feels bad before the attacks and has lame muscles afterwards. He does remember things indistinctly of what they tell him as being a part of convulsions occurring in the day time.

Preceding the evening of the tragedy he says he was at his brother-in-law's; that he felt badly, but had no trouble; that he went home, and he thinks went to bed; that he has faint memory of trying to get out of the burning house, and later knocking on the neighbor's door. Says he has no previous memory of the fire, and still knows nothing of the children's death only as told to him. He has the gross, heavy epileptic countenance. His pupils are large in the sunlight and hyperactive. His movements are all of that ugly, uncertain, impulsive mental be-



Before retiring this night he had the cerebral aura (dizziness, etc.), and on waking after the crime his muscles were sore and his head hurt him.

The foregoing constitutes the facts, unbiased, yet, with reasonable proof of the prisoner's unfortunate condition, rendering him unconscious and irresponsible, he was convicted and sentenced to death on purely circumstantial evidence.

May 6th, 1900, I examined him with Dr. Grigsby. He is 35 years old. Was married when 23 years old. He had typhoid fever at sixteen years of age. Thinks he was well afterwards. He occasionally took a drink, but was not a drunkard. He does not remember being attended by my friend Dr. Grubbs, of Plymouth, Kansas, in 1897. (Dr. Grubbs was called during the night to attend him when he was having very bad grandmal convulsions.) He says he has no memory

wilderment type, punctuated by the uncanny absent-minded stare. He is moody, despondent and weeps much at times. He has fears, dreads, apprehensions and mild delusions of persecution. His memory is faulty at periods and often he cannot remember, and therefore improperly reports the car numbers in the mines.

Dr. Grigsby tells me that at one time he had hallucinations and such delusions of horror concerning work in the mines that he submitted to every form of prison punishment for thirty days, and solitary confinement for sixty days before he would return to the mines.

Dr. J. I. Morrison, of Emporia, Kansas, wrote me December 29th, 1899, that the prisoner was treated by him ten years ago for grand mal epilepsy; that attacks were usually at night; that the attacks were less frequent than formerly at the time of the tragedy and

that the attacks had become so infrequent during the day that his neighbors were not aware that he was an epileptic; that he was rather morose and a man of few words; that he would stand around on the street corners nearly the whole day and have but little conversation with any one.

At the end of seven years' observation of him as a prisoner Dr. Grigsby reports that he maintains the same sullen mood he had when admitted. As previously stated, he worked in the mines, but his delusional and hallucinatory state of mind was so aggravated that he was uncontrollable, and that no form of punishment could subdue him. Also that his defect in mind was such that he could not remember well enough to do the work assigned to him. Since then he has worked in the twine mills and his conduct is good. He never asks for anything, and never speaks unless spoken to. He takes no interest in anything, and accepts everything in an indifferent, listless sort of a manner. He has had no falling convulsions during the day so far as known, but any he has had have been at night, and therefore cannot be correctly reported.

These crimes related are motiveless, revolting, in human acts. Closely studied in a composed and unbiased manner they are revealed as simply the products of madness. These subsequent seven years clinical study shows the procedure of the dignified law to have been a miserable farce; still, had a competent alienist offered an honest clinical analysis in interpretation of the true mental status of either offender he would have been publicly ridiculed and excoriated by the prosecution and, in all probability, ignored by both judge andjury. Suffice to say that no jury is competent to pass on such cases. One learned lawyer and two alienists appointed by the court would soon determine the sanity or insanity where such a question is raised. Should insanity exist, the individual should be committed by the court to an asylum for criminal insane to remain forever, *unless released only by the order of the court.*

Other states successfully conduct asylums for criminal insane, and why not Missouri and Kansas step into the line of advanced thought and care for their unfortunates?

My deceased friend, the late Dr. Allison of the Mattewan Asylum for Criminal Insane of New York, once told me that criminal epileptics had no chance to ever receive recommendation from him to the court for a hearing as to their convalescence. He said such a recommendation would have to be based on a four years' absolute freedom from attacks and positive evidence would have to be furnished him that the patient had been watched by a competent person every minute, day and night, for the four years. This, he said, was impossible. Dr. Allison showed me one man who had been in Mattewan for fourteen years, and because of lack of proof of no attacks day and night he would never get out.

So long as our civilization must propagate epileptics we should be civilized enough to humanely care for them. By this simple method we can do it, and have nothing to be ashamed of.

THE DOCTOR IN POLITICS.—The recent election in San Francisco shows the wisdom of having medical men in politics. By an overwhelming plurality, under the most difficult political conditions of labor strife, commercial and social unrest, Dr. Edward R. Taylor was elected Mayor of San Francisco; Dr. Washington Dodge, assessor; Dr. T. B. W. Leland, coroner, and Dr. A. H. Giannini, member of the board of supervisors. This speaks well for the doctor in politics. Take the recent election of San Francisco municipality and it is throughout most satisfactory and is certain to insure good government and prosperity for our city.

HIPPOCRATIC OATH.—I swear by Apollo, the physician; by Aesculapius, by Hygeia, by Panacea, and by all the gods and goddesses, that I will fulfill religiously, according to the best of my power and judgment, the solemn vow which I now make. I will honor as my father the master who taught me the art of medicine; his children I will consider as my brothers, and teach them my profession without fee or reward. I will admit to my lectures and discourses my own sons, my master's sons, and those pupils who have taken the medical oath, but no one else. I will prescribe such medicines as may be best suited to the cases of my patients, according to the best of my judgment; and no temptation shall ever induce me to administer poison. I will religiously maintain the purity of my character and the honor of my art. I will not perform the operation of lithotomy, but leave it to those whose calling it belongs. Into whatever house I enter, I will enter it with the sole view of relieving the sick, and conduct myself with propriety towards the women of the family. If, during my attendance, I happen to hear of anything that should not be revealed, I will keep it a a profound secret. If I observe this oath, may I have success in this life, and may I obtain general esteem after it; if I break it, may the contrary be my lot.

ARTERIA MESENTERICA DISTAL—THE DISTAL MESENTERIC ARTERY.

BYRON ROBINSON, B. S., M. D.

CHICAGO.

Dissection.—Expose the viscera by a crucial abominal incision, reflect the enteron rightward, and the tranvserse colon proximalward. Draw the left colon and sigmoid leftward. Remove the distal transverse mesocolic blade, the right mesocolic blade of the left colon and right mesosigmoid and the main parts of the distal mesenetric artery will be inexposed.

The description of the distal mesenteric artery varies more than that of any other variety—suggesting its form. The reason for the multiple variation in description of the distal mesenteric artery lies perhaps, first, in the multiple, though frequently insignificant variation of form and number in its branches and arches. Second in the limited number of subjects dissected and observed by single individual writers. Third, in an attempt to compare single dissections with some of the few popular standard illustrations, the view may be acquired that there are numerous types or variations.

In general the arteria mesenterica distal (inferior) should be described as consisting of the following segments:

I. Trunk.

II. Branches: 1. Left colic artery. 2. Sigmoid artery. 3. Proximal hemorrhoidal artery.

III. Arches: (a) left colic arches; (b) sigmoid arches; (c) proximal hemorrhoidal arches.

IV. "Straight terminal vessel" of the distal mesenteric artery.

GENERAL REMARKS.

Topography.—Holotopia.—It is nonsymmetrically located in the median left half of the body. It is an unpaired artery.

Skeletopia.—It is situated leftward of the vertebral column, between the ribs and coccyx.

Syntopia.—It supplies the distal half of the colon—left half of transverse colon, left colon, sigmoid and rectum. It is the artery of the fecal reservoir. It is intimately associated with the peritoneum ventrally and dorsally with the musculature of the dorsum. It lies ventral to and in contact with the distal aorta, vasa spermatica (ovarica) kidney, ureter left common iliac. It is imbedded in a strong sheath of connective tissue and in the membrana mesenterii propria.

Idiotopia.—The relations of the component parts are arranged practically in the form of trunk, arches, straight vessels, located at a greater or lesser distance from the colonic border.

The entire body may be injected through the distal mesenteric artery. The varied forms of the distal mesenteric artery has induced varied types of descriptions. I shall assume from the study of the anatomy, literature, three types of description:

Type A includes those anatomists who divide the common trunk, primary, of the distal mesenteric artery in two branches, i. e., it bifurcates, viz.: arteria colica sinistra (ramus proximal) and arteria hemorrhoidalis (ramus distal) (see Figs. 30, 42, 26, 23, 35, 25, 37, 28, 32, 38).

I shall designate the primary branches of the common trunk of the distal mesenteric artery as: (a) ramus proximal; (b) ramus medial; (c) ramus distal. This makes the common trunk bifurcate in 70% and trifurcate in 30 of our personal dissections. In this type may be found Tiedeman (1822), Cloquet (1828), Meckel (1832), Bourgery and Jacob (1839), Cruvelihier (1844), F. Arnold (1847), Luschka (1863), Chr. Aeby (1871), L. Hollstein (1873), Harrison Allen (1873), Hnele (1876), Rudinger (1878), W. Krauss (1879), C. Bock (1880), R. Hartman (1881), Joessal (1884), Hyrtl (1885), Ad. Pansch (1885), Gegenbaur (1888), Henry Morris (1893), Testut (1895), Spalteholtz (1898), G. Brossike (1899), Toldt (1900), Gray (1905). The above are mostly German antaomists. Nations possess convictions and imitate each other. In 70% of our subjects the truncus communis arteria mesenterica distal was divided in two brances—it bifurcated.

Type B represents those anatomists who describe the trunk of the distal mesenteric artery as emitting three distinct primary independent branches—the trunk trifurcates (see Figs. 36, 39, 40, 41, 43, 44, 47). In this type (B) may be found Andrew Fyfe compend of anatomy (1823), Bourgery and Jacobs (1839, Erasmus Wilson (1842), Alfred von Behr (1847), the Dublin Dissector (1848), Harrison Allen (1883), Quain (1892), Morris (1892), McClellan (1892), Spalteholtz (1898), Rauber (1903), Cunningham (1905).

The above authors represent chiefly English anatomic views and even anatomists assume distinct national airs.

In our personal dissections 30% of the trunks of the distal mesenteric artery possessed trifurcation, i. e., three primary independent arteries originated from it, viz.: arteria colica sinistra, arteria sigmoidea, arteria hemorrhoidalis proximal (see Figs. 36, 39, 40, 41, 43, 44).

Type C represents a mixed description, in-

cluding such anatomists as Theile (1844), Poirier (1896) and Jenesco (1889).

This type (C) of description practically belongs to the type of (a) where the trunk of the distal mesenteric artery is bifucated into two primary branches, but Thiele (1844), Poirier (1890) and Jonesco (1884) divide the two primary branches into two large subordinate adjacent branches to which they apply names, e.g. Thiele designates the branches of the arteria colica sinistra as ramus anastomaticus superior (proximal) or colica sinistra superior (proximal colica sinistra media and colica sinistra inferior (distal) and the distal branch (unnamed) is divided into hemorrhoidalis superior (proximal). Another class of anatomists describe the trunk of the distal mesenteric artery as dividing into four or five primary independent branches, e g., colica sinistra superior (proximal) media and inferior (distal) also one or two hemorrhoidalis proximal. Another class of anatomists are

Fig. 1 (50).—This illustration drawn from an injected, dissected specimen presents an average condition. The trunk, arches and "straight terminal vessel" of the distal mesenteric artery are manifest as well as its anatomic union with arteria mesenterica transversa forming the Riolan-Haller arch—the largest arch in the body. I. The trunk, 1½ inches in length, bifurcates the proximal branch, bury the arteria colica sinistra, which engages in mesocolic arch formation, completes the Riolan-Haller arch and the "renal arterial field" (K). The distal branch of the trunk rebifurcates the proximal branch, becoming the arteria sigmoidea, which engages in mesosigmoid arch formation with the arteria colica sinistra and proximal hemorrhoidal artery. The distal branch of the second bifurcation, apparently a direct continuation of the trunk of the distal mesenteric artery, is the proximal hemorrhoidal artery, which engages in mesosigmoid arch formation with the arteria sigmoidea. The proximal hemorrhoidal artery bifurcates and supplies the rectum bilaterally, as noted in the illustration.

The "straight terminal vessel" or vas coli terminale rectum (of ample length—1½ to 2 inches—for clamp or ligature without damage to the mesocolic arches) is manifest in this illustration.

Observe the number, form, dimension (diameter and length), location, relation, characteristic and topography of the branches and arches of the distal mesenteric artery of this illustration drawn from an injected dissected specimen.

The most significant mesocolic zone is that of the "vas coli terminale rectum," or the "straight terminal vessel of the colon," which is directly applicable to practical surgery during resection, lateral anastomosis or circular colorrhaphy. In fact the management of the blood supply in intestinal surgery is the most important factor.

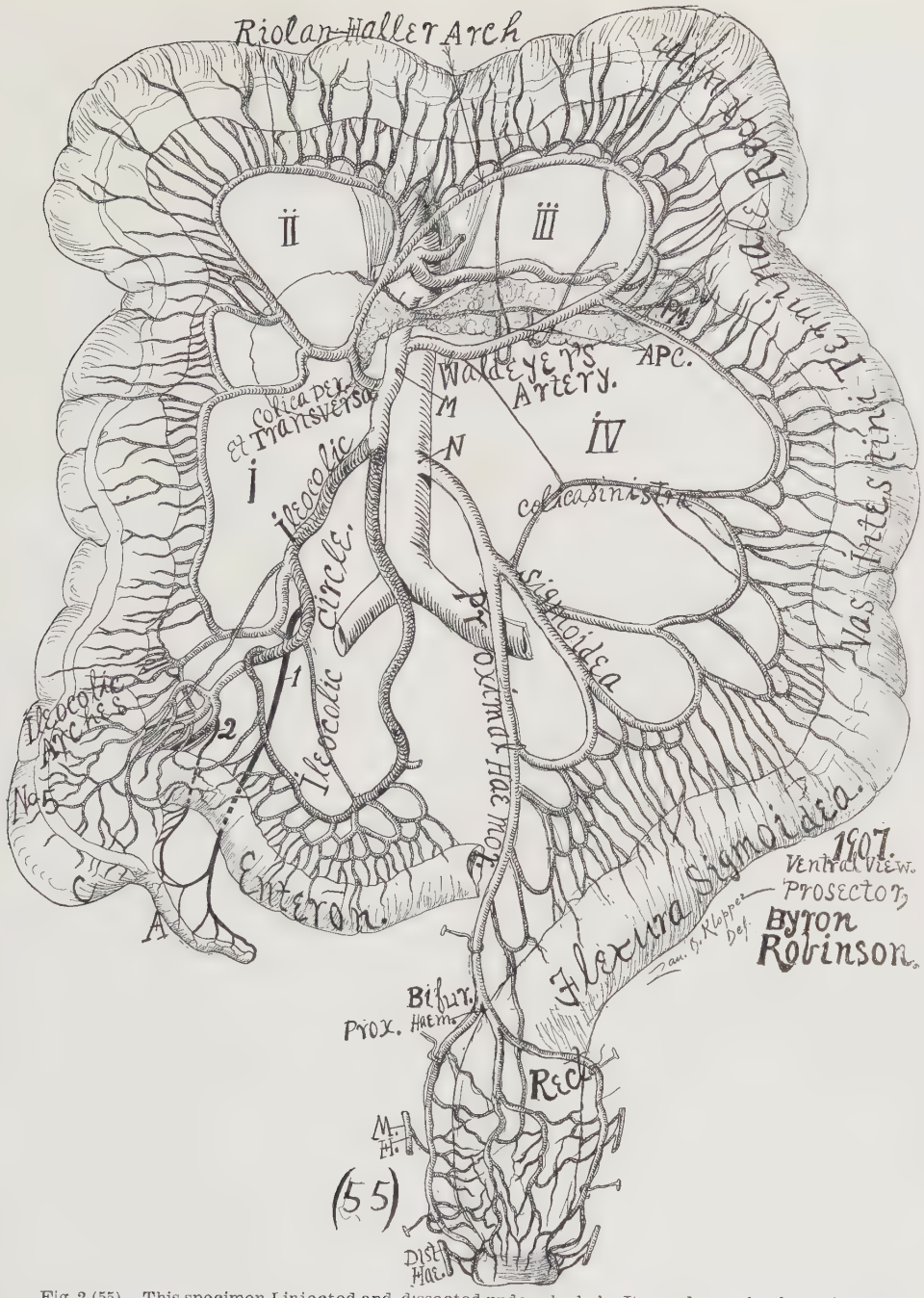


Fig. 2 (55).—This specimen I injected and dissected under alcohol. It was drawn by the artist Zan D. Klopper while lying on a plane surface. It presents the I, trunk; II, branches; III, arches, and IV, "straight terminal vessels" of the arteria mesenterica distal. I, The trunk, 1½ inches in length, bifurcates into a proximal and distal branch. The proximal branch rebifurcates into arteria colica sinistra and arteria sigmoidea. The distal branch of the trunk continues to the rectum as the proximal mesenteric artery. II and III, the branches of the distal mesenteric artery form the arches, the number, form, dimension (length and diameter), location, relation, characteristic and topography of which are evident in this illustration from the solid ground of nature. IV, Practically the most important segment of the distal mesenterica artery is the "straight terminal vessel," which is of ample length (¾ to 2 inches) to apply the ligature or clamp without damage to the "mesocolic arches," (especially that of Riolan and Haller) during resection, lateral anastomoses, circular colorrhaphy. The "straight terminal vessel" of the distal mesenteric artery is especially significant in the region of the sigmoid and rectum. The utility of the arches to concentrate blood currents to localized intestinal segments for function is evident in this figure. Observe that the origin of the trunk of the distal mesenteric artery and the bifurcation of the trunk of the mesenteric are located at the same level—III, lumbar vertebra. The Riolan-Haller arch is divided, fragment by Waldeyer's artery—arteria colica transversa accessoria. Waldeyer's artery lessens the strain and jeopardy of the extreme length of the Riolan-Haller arch or arcus transversa colica. I present in this figure the arterial fields, arteria area or the four major mesocolic circles, I, II, III, IV. The major mesocolic circles present bilateral duplicity; each major mesocolic circle contains important viscera or marks important visceral areas (see figure). The distal major mesocolic circles (I and IV) presents the renal area. The proximal bilateral mesocolic circles (II, IV) present the pancreatic area.

Testut (1896), Winslow (1752), Debirre (1890), Sappey (1876). It appears to me that these anatomists are describing anomalies or rather variations of form, accessory arteries. They are dignifying subordinate branches into primary ones. This is an error. It is true the proximal hemorrhoidal artery finally bifurcates, however, the proximal hemorroidal artery primarily consists of a single primary branch—a single trunk and cannot consistently be included as consisting of several primary branches. It is not a paired or bilateral artery.

THE DISCREPANCIES OF AUTHORS IN REGARD TO THE DESCRIPTION OF THE ARTERIA MESENTERIC DISTAL.

Dissections demonstrate that the common trunk of the distal mesenteric artery presents the following, viz.: (a) It bifurcates, i. e., emits two primary branches (70%); (b) it trifurcates, i. e., it emits three primary branches (30%); (c) its proximal branch may bifurcate or emit two branches, i.e., the colica sinistra and sigmoidea; (d) the distal branch may emit two branches, i. e., the proximal hemorrhoidal and sigmoidea. In other words, the sigmoid artery may arise from the proximal or distal primary branch of the trunk. When the common trunk trifurcates the median primary branch is the sigmoid artery.

However, some authors will illustrate the trunk of the distal mesenteric artery as distinctly bifurcated, but immediately describe it as emitting three primary branches (Harrison Allen, 1873, and Bourgery and Jacobs, 1839). The illustrations in those anatomies are more accurate than the descriptions. Many anatomists copy Tiedeman (1822) without credit, and therefore is difficult to decide to what type their descriptions belong, because an illustration at once decides the type distinctly, whether the trunk bifurcates or trifurcates. Erasmus Wilson (1844) presents a distinct bifurcation of the trunk of the distal mesenteric artery, but directly describes as dividing into three primary branches—trifurcating. This accurate anatomist's description was not as accurate as his illustration.

George McClellan (1892) presents illustrations of bifurcation and trifurcation of the common trunk of the distal mesenteric artery, but at once assumes a trifurcation, a description into three primary branches—arteria sinistra, sigmoidea and hemorrhoidalis. Spalte holtz (1898) presents five illustrations with distinct bifurcation of the trunk of the distal mesenteric artery, however, assumes a trifurcation as description or triplicate branches, sinistra, sigmoida and proximal hemorrhoidalis. This discrepancy may be traced through numerous anatomies.

With these prefatory remarks we will preceed to describe and illustrate the distal mesenteric artery.

For convenience of description we will divide it into segments, viz.: I, trunk; II, branches; III, arches; IV, "straight terminal vessel of the intestine" (colon).

I. COMMON TRUNK (TRUNCUS COMMUNIS).

Origin.—It arises, similar to the main other intestinal arteries, from the ventral surface, at the distal third of the abdominal artery.

Its origin is located opposite the third lumbar vertebra in the region of the bifurcation of the trunk of the proximal mesenteric artery. Its location is on the left ventral and lateral surface of the aorta $1\frac{1}{2}$ inches proximal to the aortic bifurcation and 3 inches distal to the origin of the arterial mesenterica proximal. It emerges from the aorta 2 inches distal to the arteria renalis and $1\frac{1}{2}$ inches distal to the arteria spermatica (ovarica). The common trunk is located practically midally and is unpaired.

Dimension.—It is the smallest of the three arteriae colicae—colica dextra, colica transversa, ileocolic. It is markedly less in dimension than the renal and greater than the sermatica.

It averages one inch in length and one-eighth inch in diameter.

Course.—It courses dorsal to the peritoneum, ventralward in contact with the left surface of the aorta and obliquely leftward over the surface of the psoas. Whence it primarily bifurcates in 70% of subjects (into colica sinistra and proximal hemorrhoidal) and trifurcates in 30% of subjects (into colica sinistra, sigmoidea and proximal hemorrhoidal).

The constancy of the distal mesenteric artery is remarkable. The common trunk is imbedded in a strong sheath of connective and elastic tissue of ample diameter allowing marked peristalsis—expansion and contraction, congestion and decongestion. The common trunk emits only fine branches to adjacent tissue (peritoneum and subperitoneal issue) until it bifurcates or trifurcates.

[To be continued.]

PLAGUE SITUATION IN SAN FRANCISCO.—Up to and including the 20th of of November, 1907, 97 cases of bubonic plague have been confirmed with 60 deaths. The situation is daily improving under the combined efforts of the San Francisco Board of Health, the State Board of Health, and the Marine Hospital Sevrice of the United States.

THE MEDICAL FORTNIGHTLY

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EDITORIAL

Christmas Again.

FATHER TIME has again brought us to the holiday season, and we are anew impressed with the brevity of the years; one hardly gets so that he can put the year's date on a letter without confusing it with the one preceding, before it is time to adopt a new one. The years are short, and they grow shorter as we live, only by earnest effort in living from day to day can they be said to have been worth while. We learn with the years that many of our ambitions have been the merest foolishness and many of our aims have been, happily, foiled. We also learn that each day brings its duties and is full of opportunities which we must grasp; that the day, rather than the future, is ours. Few physicians are able to go through life without becoming converted to the socialistic doctrine of the brotherhood of man, and at no season is the pleasure of this doctrine richer in possibilities than at Christmas. Such a little effort, such a little expenditure, even a kind word, is a material agent in making for happiness. The Christmas spirit is really the Christ spirit which makes giving greater than receiving. Going through the year we are apt to dwell more strongly than we should on lack of appreciation and down-right ingratitude, at this season we should consider, not what we have done, but the things we have failed to do. A bit of introspection on our short comings will insure a happy Christmas to many who are more or less dependent. Don't forget to remember in a sensible way those who serve you. Do you realize that the boy in your office has his ambitions and his rightful pleasures? Your house servant works fourteen hours a day, occupies the least habitable room in the house, and did you ever really contemplate what she gets for it? It's no wonder girls object to house service. Christmas should be as happy a day for these as it is for those better situated and a very little endeavor could make it so.

We wish our readers a happy Christmas, may each be surrounded by affection; may the fruits of a bountiful season be yours; but above all, may you realize in its fullest the joys of having realized the true inwardness of the Christmas spirit.

Doubt and Indecision.

To be a victim of doubt is one of the greatest misfortunes which can befall a man; to be constantly assailed with questionings, when a deed has been done, whether it certainly has been accomplished, and to find one's self retracing steps in an endeavor to arrive at certainty, is a fate many have experienced and which is runious to decisiveness and certainness of action. In the December Lippincott's Dr. G. L. Walton deals instructively with "The Doubting Folly." In his paper he tells of the banker, compelled by the fear that he has not locked the vault, who may return again and again, lock and unlock it a dozen times, may wake in the night bathed in perspiration and toss in his bed or walk the floor till he can satisfy his doubt, but so long as he can carry on his duties he is not insane, though the victim of intense mental suffering. He says:

"It took a young man at least fifteen minutes, in my presence, to button his waistcoat. He felt the lower button to reassure himself, then proceeded to the next. He then returned to the lower one, either distrusting his previous observation, or fearing it had become unbuttoned. He then held the lower two with one hand while he buttoned the third with the other. When this point was reached he called his sight to aid of his feelings, and glued his eyes to the lower while he buttoned the upper, unbuttoning many meantime, to assure himself that he had buttoned them. This young man said he would sometimes stop on his way to the store in doubt whether he was on the right street, a doubt not quieted either by reading the sign or by asking a stranger, for the doubt would obtrude itself whether he could trust his sight and his hearing, and, indeed, whether he were really there or dreaming."

Few of us escape doubts of this sort, and we find ourselves going back to close doors which are already closed and burdening our minds with needless anxieties about trifles which must lead us into a state of chronic indecision if not summarily checked. The need of decision in character-making has been too little urged to the attention of the

young, and the especial importance of decision in small things cannot be overestimated, for its lack is the precursor of a general instability. In these lesser things doubts should not be entertained; the going back to assure yourself that you have done a thing, or the worrying lest you have failed to do it should be put from your mind by other matters. Better discover your error by the developing facts than to live in a self-established atmosphere of doubt and anxiety; the door may be unlocked and the thief may enter, but the chance of this harm is less than that of a constant allowing one's self to go and re-lock a door which we habitually look, or in lying, sleepless, imagining it unlocked. These things are so largely a matter of habit and the habit of doubt is so unquestionably bad that there can be but one argument and that is to stop, do a thing and then live to the fact.

Progressive Medicine.

THE medical profession is made up of a considerable number of specialists and an army of general workers; of this latter class a great majority live in the smaller communities and in the country. These men have to content themselves with their one or two medical journals, most subscribing for a general journal (modesty hinders the suggestion that it should come *twice* each month) and some journal devoted to the special work which would occupy his attention were he situated more favorably. Few have access to a medical library of size and to the bulk of current medical literature. It is to meet the need of just this class of men that "Progressive Medicine" is being published, though it is by no means unappreciated by city physicians and specialists. Progressive Medicine gives a resume of the latest literature, presented in systematized form, after being assembled from the various American and European journals, by an authority on each subject. Allowing that no doctor can well afford to reach even a small proportion of the original papers quoted in the original publications we can think of no more effective way of rounding out his years' medical reading than by assuring himself of the reception of this periodical which is so voluminous that each of its quarterly issues is in itself a goodly book. Basing an opinion on a number of years' intimate acquaintance with Progressive Medicine we feel that it cannot disappoint; 1907 was better than any previous year, and 1908 will be still better. We seldom feel called upon to use other than the Review Department for the consideration of books and periodicals, and we feel that the scope of Progressive Medicine and its importance to the general practitioner abundantly justify doing so in this instance.

Sulphate of Magnesium Anesthesia.

THE lay press is heralding the announcement that researches in the Rockefeller Institute for Medical Research made by Dr. S. J. Meltzer, have demonstrated that the injection of twenty per cent solutions of plain, every day sulphate of mangesium produces an anesthesia which is invariably effective and safe. It is needless to give the details as presented, or to express our surprise that this institute makes its announcement through such channels; the statement sounds reasonable to all who have had experience with infiltration anesthesia, and its evident harmlessness suggests its being tried at the first opportunity

LOCAL MEDICAL NEWS

DR. A. L. BENEDICT, of Buffalo, spent a few days in St. Louis lately. During his stay he addressed the Medical Section of the St. Louis Medical Society at its meeting, December 14th, speaking of Ausculatory Percussion. His address contained much which was original, and called forth considerable discussion.

THE AMERICAN JOURNAL OF UROLOGY will hereafter be edited by DR. WM. J. ROBINSON, editor of the Critic and Guide, Therapeutic Medicine, etc. It is to be considerably widened in its scope, including the subject of dermatology and a broader conception of urology than has heretofore been manifest. Dr. Robinson will make the journal a success.

THE nomination ballot of the St. Louis Medical Society, which was mentioned in our last issue, was a tremendous success in that very few members of the society failed to be voted for for something. Those of our good friends who object to caucuses and to any effort to mould opinion, need but to study the returns to see how imperatively something of the kind is needed. Two hundred and seven names were presented for two-year delegate to the State Association, and other positions were offered a similar number. This shows what a wealth of good material there is, and it also shows lack of concentration.

DR. C. L. HOLT, formerly of St. Louis, but now of Fort Smith, Ark., has been elected secretary of the Sebastian Co. (Ark.) Medical Society.

DR. ARTHUR F. MAISCH, formerly of this city, but now of Globe, Ariz., spent a few days renewing old friendships recently. The doctor and his family are bound for Europe, where he will spend some months in clinical and laboratory work.

THE WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.—The annual meeting of the Western Surgical and Gynecological Association is scheduled to meet in St. Louis on December 30th and 31st, and will be one of the more important gatherings of the year. This association numbers among its membership the foremost men of the section and, though its membership is limited, its meetings are open and attract a large attendance of non-members, who always find themselves most cordially welcomed. The scientific work done by this association is of a class to make attendance a privilege, and it is believed that this year's meeting will attract a more than usually large representation of the membership and of non-members who are interested in these subjects. Naturally the St. Louis profession generally will join in making all outsiders welcome. The association has been most fortunate in the choice of headquarters and meeting-place; in choosing the Southern Hotel it was made possible to combine assembly hall, banquet hall, lounging rooms and private quarters all under one roof, and to be certain that everything that is best is to be at hand. Members and guests of the association are urged to stop at the "Southern" and to avail themselves of every feature of the meeting.

AFRICAN TOBACCO.—The tobacco industry of South Africa is highly developed, especially in the Transvaal. The quality of the tobacco is characterized by a much smaller nicotin content than is found in Virginia tobacco. J. McCrae, in the Chemiker Zeitung, reports that South African tobaccos usually run from 0.5 to 2 per cent nicotin; only a few show a higher nicotin content, and these grow only in the Eastern District of the Transvaal. Barbeton tobacco contains 38.8 per cent nicotin, Piet-Retief tobacco 36.0 per cent, and Venter's Kroon tobacco 2.7 per cent. The large amount of waste is used as fertilizer on account of the nitrogen and potash contained therein. The making of tobacco extracts and nicotin is not carried on, for to do this profitably calls for a tobacco containing at least 4.5 per cent of nicotin.

THE REVIEWER'S TABLE

Books, Reprints, and Instruments for this department, should be sent to the Managing Editor, Century Building, St. Louis

PHYSICIANS' VISITING LIST of P. Blakiston's Son & Co. The 57th year. For 25 patients per day or week, $1.00; for 50 patients $1.25.

This visiting list is too old a friend to need an introduction to any save the latest comers into the fellowship. The 1908 issue presents all the pleasing characteristics which have played a part in its past great popularity. It is remarkable for convenience, compactness and practical arrangement.

INTERNATIONAL CLINICS, A Quarterly of Illustrated Clinical Lectures and especially prepared Original on Treatment, Medicine, Surgery, Neurology, Obstetrics, Gynecology, etc., by leading members of the Medical Profession throughout the world. Edited by W. T. Longcope, M. D., Philadelphia, U. S. A. Volume III. Seventeenth Series, 1907. Philadelphia and London: J. B. Lippincott & Co.

The third volume of this eminent series is well in keeping with its predecessors. The section on treatment is represented by Edsall, who contributes a very useful article on "Some Practical and Theoretical Considerations Concerning Diabetes," while Robin writes an interesting chapter "On the Treatment of Pneumonia, and especially the Action of Metallic Ferments in this Disorder." In this same section Wainwright writes on "Mechanotherapy" and Bullock discusses the "Curability of Tuberculosis." The contributors to the section of medicine are Stanton, who writes a very good article on "The Blood Pressure in Tuberculosis;" Porter details Two Interesting Cases of Primary Carcinoma of the Liver; one with fibrinous pneumonia; one diagnosticated by abdominal paracentesis." The subject of Acute Gastritis is ably discussed by Somerville, while "The Salient Factors in the Estimation of Renal Disease" by Wallace is perhaps the most note worthy article under this caption. A well written article on general Abdominal Enlargement with special reference to the Hepatic Cirrhosis, comes from the pen of Mark Brown. The most absorbing article in the surgical section is perhaps that written by Loebon on Inoculability of Tumors and the Endemic Occurrence of Cancer. Sweet treats the subject of "Surgery of the Blood Vessels" in a very clear and up-to-date manner. "Inflammation of the Gall-bladder and Ducts" is discussed by Vaughn. Hall writes on "Perforating Ulcer of the Foot; its Etiology and Treatment," and Roberts, "Some Surgical Aspects of Tuberculosis." The section on gynecology is represented by Brownaire, Green and Hunter, while the sections on genito-urinary diseases, ophthalmology, neurology, dermatology and pathology are represented by experienced men, and contain valuable suggestions.

PROGRESSIVE MEDICINE. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College, Philadelphia, assisted by H. R. M. Landis, M. D. Vol. IX, No. 3. Philadelphia and New York: Lea Brothers & Co. ($6 per annum.)

This issue is exceptionally good and the reader will be well compensated by a perusal of its contents. William Ewart elaborates on diseases of the thorax and it viscera, including the heart and blood-vessels. Among the pulmonary affections, tuberculosis is the paramount feature. Not a single scientific contribution of any consequence published in recent times has escaped the pen of the writer. Perhaps the most interesting is that written on "Dualism in Tuberculosis Hominis;" its bovine and human derviations, to say nothing of the remaining excellent capitulation of the general etiology and mode of invasion. The more recent contributions on asthma, hay fever, pleurisy and other pulmonary conditions are given a brief and intelligent consideration. Timely articles on diseases of the pericardium, heart and vessels are duly abstracted. Dermatology and syphilis are represented by William Gottheil in an absorbing and practical style. He begins with a list of dermatological axioms as given by Aronstram with his own changes, omission and additions. This list will be found useful as a general guide to the every-day practitioner. The recent advancements made in this department are appropriately dicussed with sufficient illustrations to elucidate the text. The pages are devoted to the progress made in syphilology. The section on obsterics is contributed by Edward Davis who writes over fifty pages on pregnancy followed by an exhaustive consideration of labor and obstetrical surgery. Adequate space is also assigned to the puerperal period, the fetus and new-born children. Wm. Spiller presents diseases of the nervous system in a very clear and attractive manner. The respective diseases taken up are those of the brain, spinal cord, diseases of the nerves and miscellaneous nervous diseases. The usual classified index concludes the volume.

ERRORS IN URINE-TESTING WITH FERROCYANIDE.—H. Schmiedl finds that when the ferrocyanide of potassium test is applied to urines that have been collected in zinc urinals, or from patients who have been subjected to zinc chloride treatment, a positive reaction for albumin is often obtained. This should again place those who diagnose disease upon the result of urine analysis on thier guard. To rely solely upon one test is not a safe policy for either the physician or the druggist to follow.—Wiener Medizinischer Wochenschrift.

MEDICAL PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

INTERNAL MEDICINE

O. E. LADEMANN, M. D.

The Etiology of Tuberculosis.— Ravenel (Am. Jour. of the Med. Sciences., Oct., 1907) gives an extensive literary resumé on this subject. He holds that the alimentary tract is a frequent portal of entry for the tubercle bacillus. The tubercle bacillus is able to pass through the intact mucous membrane of the alimentary tract without producing a lesion at the point of entrance. This takes place most readily during the digestion of fats. The bacilli pass with the chyle through the lacteal and thoracic duct into the blood, which conveys them to the lung, where they are retained largely by the filtering action of the tissues. Infection through the alimentary tract is especially frequent in children. Milk, from tuberculous cows is the source of infection in many cases. Our present knowledge does not enable us to state the exact proportion of cases of tuberculosis due to this cause, but it is probably considerable. Tuberculosis can be communicated by contact, such as kissing, soiled hands, accidental injuries in postmortem work, or during the cleansing of vessels used by consumptives, etc These modes of infections play a comparatively small part in the dissemination of the disease.

The Examination of the Feces for Occult Blood, with Special Reference to the Value of Benzidin Test.—Goodman (Am. Jour. of the Med. Scs., Oct., 1907) strongly advocates the benzidin test in preference to all other methods for the detection of macroscopically invisible blood. He recommends the procedure of the test as follows: A small portion of the feces solution, obtained by grinding up the feces with water, is poured into a test tube and boiled. While this is cooling, a concentrated solution of benzidin is made by dissolving as much benzidin as is contained in a very small spoon spatula in about 3 to 5cc. of glacial acetic acid. A few drops (1 cc. (are poured into a test tube and about 3 to 10 drops of this boiled feces solution further diluted with equal parts of water, are added and the two shaken. To this are now added 1 to 3 cc. H_2O_2 (3 per cent) and shaken, when, in the presence of blood, a deep dirty green, or a beautiful deep blue color appears, changing in the course of time to a peculiar dusty violet color. Only the green or blue color is to be considered positive. The author made comparative tests in 129 stool

examinations. The three tests used, namely, the aloin, guaiac and benzidin test agreed 110 times out of the total number of stools examined. The writer also tried the benizdin test on gastric contents and the urine, using the method advised by Schlesinger and Holst, which consists in adding 0.5 to 1 cc. of glacialacetic acid to 10 cc. of urine, invert a couple of times, then add one-third volume of ether and shake well. After standing a short time one can make a sharp separation by the addition of 5 to 10 drops of absolute alcohol and gentle shaking. If no separating funnel has been used, the ether may be drawn off with a pipette and this extract treated with benzidin and H_2O_2 in the usual way, a green to blue color indicating blood. The above author's claim that the benzidin test is twenty times sharper than Heller's and five times as sharp as the guaiac or aloin tests, aud they prefer it in testing urine for blood. Goodman makes the following remarks concerning the benzidin test: 1. The benzidin test is to be recommended unreservedly of feces, gastric and urine work. The objection to the exterme sensitive is invalid, as a control by other tests may be made; while that very objection supports the author's assertion that if the benzidin test is negative the specimen may be considered free from blood. The writer advises checking a positive reaction with either the guaiac or aloin test, preferably both. 2. The reason given for advising the benzidin test as given by Schlesinger and Holst are sufficient and need no further discussion. 3. Only the Merck benzidin puriss, should be used. 4. The quantities of the reagents must be carefully observed and the test tubes must be clean. 5. All disturbing factors must be first removed. By this is meant inorganic as well as organic. Goodman advises, if the feces show a positive reaction for blood, that another stool be not examined until the diet and medication have been regulated, as it appears to him to be as useless to examine feces repeatedly for occult blood, making no effort to regulate the diet and medication, as it would to examine the gastric contents chemically after a promiscuous meal, not taking into consideration the time, quantity and quality of food ingested.

Pepsin Digestion in the Absence of Free Hydrochloric Acid.—Schütz (Wiener klinische Wochenschrift, No. 44, 1907) remarks that the presence of free hydrochloric acid in the stomach is not necessary to carry on pepsin digestion, as it is possible to have an energetic pepsin action with a considerable defi ciency in free hydrochloric acid. When the hydrochloric acid content is low albumin digestion goes on uninfluenced, becoming more active the greater amount of combined hydrochloric acid present. This takes place shortly after the corresponding amount has been secreted. While a determination of the total gastric acidity is of diagnostic and therapeutic value a quantitative analysis of free hydrochloric acid is useless.

Four Gases of Hysterical Amaurosis.—Mansilla (Rev. de Méd. y Pract., Sept., 1907) found but sixty cases of hysterical blindness recorded. Three of his observations were in women presenting many of the hysterical phenomena, while his fourth case, a young man, showed no other evidence of hysteria. In all of the cases a rapid recovery followed.

The Differentiation Between Transudates and Exudates.—Janowski (Berliner klinische Wochenschrift, No. 44, 1907) strongly advocates Rivalto's test as a simple and reliable test in differentiating exudates from transudates. The test is made as follows: The fluid to be tested is allowed to drop into an acetic acid solution (2 drops of glacial acetic to 100 cc. of water). In exudates each drop, as it enters the acetic acid solution, leaves a distinct white trail, where as in transudate the drop entirely dissolves leaving nothing behind. The author has given the test a trial in one hundred exudates and transudate.

An Early Symptoms in Ileus.—Ewald (Berliner klinische Wochenschrift, No. 44, 1907) calls attention to an early and hitherto comparatively little observed symptom of ileus. The stomach contents has a decided feculent odor which can easily be detected by stomach lavage.

Kuhn's Lung Suction Mask for the Hyperemic Treatment (Bier) of Pulmonary Tuberculosis.—Willy Meyer (Medical Record, Nov. 9, 1907) comments on the suction make treatment as follows: 1. That the beneficial influence of the mask will naturally be best shown in cases of incipient pulmonary tuberculosis, or better still, when used as a prophylactic. 2. That also advanced cases are greatly benefited by it, as long as chronic toxemia and pronounced weakness of the heart do not render impossible any kind of improvement. 3. That the risk of hemorrhage from the lungs does not forbid its use; on the contrary, there seems to be a diminished liability of a return, as the granulations in the lung tissue apparently get stronger under the application of the mask; same as we observe this ingranulation on the surface of the body, while under hyperemic treatment. 4. That post mortem observation of the lungs of a patient who died of chronic intestinal tuberculosis and in whom the

mask had been used several months, has shown the foci isolated and surrounded by a mass of new-formed connective tissue, the latter being in the stage of cicatrization. 5. That on account of the larger quantity of blood being aspirated into the lungs, more oxygen enters the circulation; furthermore, that in consequence of the resistance offered to inspiration, the entire system of respiratory muscles is strengthened, on the basis of the idea underlying the constituency of the blood, the use of the mask not only incidentally improves the usual anemia of phthisical patients, but promises to become one of the most powerful physical aids, so far known to us, in our fight against ordinary anemia. 7. That, according to the degree of obstruction to inspiration arranged for, the mask produces the effect of various high altitudes on the general system, that is to say, it rapidly increases the number of red and white blood corpuscles, of the latter especially the polynuclear neutrophiles, and the percentage of hemaglobin. This is produced by the irritationg effect of the condition of reduced tension of oxygen in the blood on the blood-producing tissues of the body, principally on the bone marrow. Inasmuch as the increase of blood elements begins very early, one hour after applying the mask, it will be interetsing to watch whether this obstructed inspiration might not be used to advantage in surgical patients, especially after abdominal operations, to produce artificial leucocytosis. 8. That the mask incidentally has proved of great benefit in relieving pulmonary circulation in cases of advanced valvular disease of the heart, as also in cases of obstinate asthma. This physical treatment of pulmonary tuberculosis will, of course, not do away with the well tried and time-honored treatment by means of tuberculin, pure air, rest, forced nutrition, proper drugs, etc. It is but another, though most important link in the chain of our therapeutic resources in the fight against and probable ultimate conquest of the scourge of mankind. It increases the natural protecting forces of the organism, by means of strengthening the normal functions of the body. It will prove to be of especial value in dispensary practice and in the treatment of such phthisical patients as are not endowed with the riches of this world and cannot afford to leave their houses and their families. The writer also advocates the prompt introduction of Kuhn's mask for the sanatoria treatment of pumonary tuberculosis as well as in private practice.

Differential Diagnosis Between Measles and Rubella.—McClanahan (Jour. A.M.A., Dec. 7, 1907) made a comparative study of the two diseases during an epidemic of German measles in Omaha, in the spring of 1894, while measles occurred endemically. He says the most important points of difference between measles and rubella are the marked prodromal symptom of measles and the presence of the Koplik spots on the inside of the lips and cheeks during this stage. The character of the rash in measles is more confluent and requires a longer time for its appearance; it also fades more slowly. Lastly, there is the possibility of complications following measles. In rubella the prodromal symptoms are slight or absent. The rash appears and distributes itself more rapidly over the face and body; it also fades more promptly, so that by the third day it has disappeared. There are undoubtedly borderline cases between these two diseases in which it is not possible to say, with absolute certainty, whether the case be one of measles or rubella, but a careful examination of the patient and a study of the symptoms will usually lead to a correct differential diagnosis.

SURGERY.

The Radical Cure of Hernia.—Drs. W. T. Bull and W. B. Coley, New York City (Jour. A. M. A., Sept. 21), give an account of the experience at the Hospital for Ruptured and Crippled, in New York, since the inroduction of the Bassini and Halstead methods for the radical cure of hernia. They call attention to the fact that the modification of the Bassini operation in the female, often called the Ferguson operation, was used by them as early as 1892, and also discuss the charge that most of their patients were children. It is true that a majority (1,034) were children, but they have operated also on 900 adult patients, and have found very little difference in the results. In the 900 adults there have been 13 relapses, or 1.4 per cent. Most of the Bassini relapses occurred in direct hernia cases in which the only way of closing the opening above the pubic bone is by transplanting the cord, cases very difficult to cure by any method. Hence we have a larger proportion of relapses credited to the Bassini operation than would be the case where the direct hernia operated on by the non-transplanting method. They emphasize the necessity of absorbable suture material and say that, dividing their cases into two periods, those before the use of rubber gloves and those after, they find a distinct improvement has followed the use of the gloves. They are also inclined to accept Hamilton Russell's view that all inguinal

hernias, except the direct, are due to a preformed sac or unobliterated portion of the processus vaginalis. They would, therefore abandon the terms "congenital" and "acquired" and use instead the classification of total or partial funicular sacs. The authors are inclined to believe that many children under four years old with hernia can be cured by a properly applied truss and that there is little risk of strangulation in these cases, while the risk of operation is decidedly greater than in older children. If a child has reached the age of three or four years and still has hernia, they advise operation. In children over four, they do not advise preliminary truss treatment, as the chances of cure are less and those of relapse greater. Truss treatment is never advocated for femoral hernia. Umbilical hernia can nearly always be cured by mechanical means; the authors use a pad kept in place by adhesive plaster and changed every week or ten days. This treatment may have to be kept up for one or two years. Trusses are seldom of much use as they are very hard to keep in position. An analysis of the 2,032 operations for the radical cure of hernia performed at the hospital between May, 1890, and July, 1907, is give; 1902 were for inguinal hernia, 76 for femoral hernia, and the others for umbilical, ventral, epigastric and lumbar hernia. In femoral hernia the usual operation was simple closing of the femoral ring with a purse-string suture, after high ligation of the sac and removal of overlying extraperitoneal fat. The results of this method are entirely satisfactory in the authors' experience. They have operated on 114 cases of undescended testes, 25 of which were of the ingino-superficial variety which they believe to be much more common than has been supposed. The mortality in the 1,978 cases of inguinal and femoral hernia was only 5, or 0.25 per cent. Details of the fatal and relapsed cases are given.

Technic of Stump Inversion in Appendectomy.—Dr. Cannaday (Jour. A. M. A.) describes a modification of the usual method of inversion of the appendix stump. After the ligation and section of the meso-appendix a hemostat is first applied to the appendix at its junction with the cecum; a second hemostat is applied just above the first and worked slowly upward for about one quarter of an inch. The appendix is severed as near the first forcep as possible, and the raw surface is touched with the thermocautery or tincture of iodine. The purse-string suture of chromic catgut, ten-day, takes a dip into the tissue of the mesoappendix side so as to eliminate all possibility of hemorrhage; this suture is passed over, not under, the handle of the hemostat and around the other side of the appendix. When the loose ends of this suture are drawn taut the handle of the hemostat is raised and the point depressed; this inverts the appendix easily and rapidly. There being no comparison in the uses of the forceps in this way with the various appendix tuckers in use. The forcep being on throughout the operation prevents the possibility of any escape of fecal matter in the perineal cavity.

THE State Board of Health of California is urging all citizens to aid in exterminating rats on account of the part they play in disseminating the bubonic plague and other infectious diseases.

BERLIN police are reported to be organizing a campaign against the numerous moving picture shows in the German capital because the doctors say they are injurious to the eyes, especially to those of the young.

HONORS FOR DR. KOCH.—Dr. Robert Koch has been promoted to the rank of Wirklicher Geheimer Rath (Royal Councillor) with the title of Excellency, in recognition of his researches into the causes of the sleeping sickness.

A COLD BATH.—A cold bath is most beneficial taken when the system is relaxed by indolence, sleeplessness, or mental unrest. During convalescence its cautious use is productive of the happiest results. A cold shock from a shower of water is often beneficial for constipation, while in catarrhal and liver troubles cold water is an essential in the treatment.

ESPERANTO CONGRESS.—The third international congress for propagation of Esperanto was held at Cambridge, Eng. last August. A report in the British Medical Journal states that two special meetings of medical men were held, with representatives from France, Germany and Poland besides the English present, sixteen in all. They nominated Professor Dor of Lyons to be the president of the newly organized International Esperantist Scientific Association. It was decided to publish an Esperanto medical dictionary and Professor Dor was empowered to treat with some Paris medical journal in regard to publishing a special Esperanto edition. A special meeting of Red Cross societies was also held in connection with the congress, and it was stated that the French Cross societies are taking up Esperanto with much enthusiasm, and that the subject is to be agitated in other countries among societies for helping the wounded.

TO THE FRONT SAINT LOUIS

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scientific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

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CLINICAL THERAPEUTICS

A forum of original experience, to which scientific contributions are invited. Responsibility for views promulgate limited to author.

THE TREATMENT OF PNEUMONIA.

W. T. MARRS, M. D.

PEORIA HEIGHTS, ILL.

The types of pneumonia are so varied and protean in their manifestations as modified by age, temperament, climate, heredity, etc., that there can not be formulated a treatment that will fit all cases. There may be in the profession men who "never lost a case," but if you or I were sick with pneumonia we would hardly want to risk our lives upon their stereotyped line of treatment unless our case presented nothing atypical. As we learn over and over every day from clinical experience there is scarcely a clearly typical, text-book case of anything. In the management of this disease, however, we are nearly all agreed upon a few things. One of the most essential things is that of making the patient comfortable and his environment cheerful and hopeful. Nearly all are agreed upon the efficacy of the mustard plaster in the incipient stage. It relieves the pain and through its influence upon the peripheral nerves three is brought about a nerve and vasomotor sedation. This should be followed by light, warm applications; absorbent cotton or goods of absorbent qualities are perhaps the best. I have employed the cantharidal paste as a tenative procedure in desperate cases and have in some inexplicable manner obtained good results from it. It gives excellent results in cases of tardy resolution, perhaps by quickening the vital powers. Moist, heavy, sloppy applications should not be used and I seriously question any good resulting from glycerine pastes only from the subjective effect they exert upon the patient's mind. Here is my argument on this point: The skin is our greatest emunctory and anything that retards its activity throws more work upon the other eliminants. A greasy or foreign substance of any kind in some measure inhibits its excretive function, and obviously the surface of the body should be kept clean and normal. Spongings with dilute vinegar and alcohol are to my mind much more logical, and I believe give better clinical results.

General elimination should be our watchword. The absorption of toxines from the alimentary canal is a very strong factor in the majority of cases. Intestinal elimination and disinfection should be very complete. Every gland and secretion should be spurred into activity, for pneumonia is more of a general than a local disease. Calomel in large doses at the beginning of the attack is to be given for its eliminative effect, and later in doses as a hepatic and intestinal stimulant. Salines on account of their thorough and hygroscopic action should be used to keep the canal reasonably clean and free from debris that will be reabsorbed. The Abbott laxative acts very nicely and is never repelled by the patient's stomach. The sulphocarbolates if given freely will neutralize remaining foci of infection. I also look upon water as being one of nur best eliminants, although all physicians are not agreed upon this point. This statement went the rounds in the journals last year: Give as little water as possible, as there is already as much fluid in the body as the heart can take care of." It has always occurred to me that an abundance of water favors renal and intestinal excretion as well as diluting toxic matter that is not easily eliminated. All remedies and measures that favor dermal relaxation have given me gratifying results, while the application of cold never has. I especially regard the cold bath as being untenable in theory, and as a rule damaging in practice.

Aconite, or its alkaloid aconotine, is our choice vasomotor sedative and therapeutic lance. Every physician should familiarize himself with this drug and know how and when to use it. In most cases it has a special indication in the early stages of the disease. Veratrine acts in a very similar way and these remedies may be given together, fortified and aided by digitaline. With these remedies the vascular system is calmed and the fever consequently lowered. Strychnine is often given, but I do not think there is a clear indication for it unless there is a slow and feeble pulse with considerable depression. At the crisis both strychnine and alcohol are useful. During the convalescence the arsenate of strychnine, perhaps with iron and quinine added, will serve very useful purpose. I have failed to derive any abortive effect from monumental doses of quinine, but the extreme cinchonism produced by it only seems to aggravate and prolong the patient's suffering.

Cough syrups are not conservative. Small doses of hyoscine, codeine or Dover powder may at times be needed. Sanguinarine is useful where there is tight mucous, especially in elderly people. Emetin also acts very nicely in controlling the cough and in producing mild sedation. Carbonate of ammonia was at one time supposed to favor a liquefying effect upon the blood, but is no longer given for this specific purpose. Where a quick stimulant is needed in case of embarrased breathing it is at times useful. Apomorphine in small doses also loosens a tight cough.

For respiratory failure a hypodermic of morphine and atropine often gives the patient a lease on life. The room should also be saturated with aqua ammonia, and the vapor of ammonia and turpentine placed in hot water is effective. If the cereberal symptoms are marked the kidney function should have attention by the use of mild diuretics. Gelsemine is in such conditions one of our best brain sedatives. For "stitch in the side" cups should be used over the painful spot. The patient should avoid emotion and exertion, but his position should be changed frequently as bodily functions are thus better performed and hypostatic congestions avoided.

All food should be nutritious and easily assimilated. Keep the patient prostrate with his head not too high. Keep him clean internally and externally and his fever within bounds. If it is not his time to die he will recover under this treatment.

SUBSCRIBE for The Medical Fortnightly.

The Serum Treatment of Exophthalmic Goiter.—Harriet C. B. Alexander (The American Practitioner and News, August, 1907) discusses the subject and reports thirteen cases. Four principal theories of the disease have been advanced: (1) That it is due to disease of the sympathetic nervous system; (2) that the seat of the malady is the medulla oblongata; (3) that it is primarily a disease of the thyroid gland; and (4) that it is a neurosis. Modern therapeutic measures have been largely based on the "thyroid" theory. The results of partial strumectomy indicate that the successful removal of a portion of the thyroid gland can lead to cure or to definite amelioration of the condition. On the theory that the thyroid secretion normally neutralizes certain general metabolic poisons in the body, Moebius and others conceived of treating cases of exophthalmic goitre, in which there is presumably an excess of thyroid secretion in the body, by introducing subcutaneously, or by the mouth, the serum of thyroidectomized animals. It was hoped that the non-neutralized general metabolic poisons of such animals would nullify the toxic effect of the excessive thyroid secretion. As to the treatment, experience has shown the great importance of general measures; complete rest for a time, fresh air, careful diet, mild balneotherapy, etc. The name thyreoidectin has been given to a preparation obtained under aseptic precautions from the blood of animals from which the thyroid glands have been removed, and which is exhibited as a reddish-brown powder contained in capsules, usually five grains each. Carefully conducted clinical trials seem to show that thyroidectin can be depended upon to control the characteristic symptoms of exophthalmic goitre. In most cases the patient experiences much relief from the restlessness, tremors, insomnia and other nervous symptoms so frequently present, and a gradual lessening of the frequency of the pulse rate, decrease in the size of the glands, and a diminution of the exophthalmos, with an increase of weight and a much better condition generally. The dose of thyreoidectin seems to be one or more capsules after each meal, according to the judgment of the physician and the reaction of the patient. In nine of the author's thirteen cases the size of the gland was materially reduced, and in every case improvement was observed with respect to one or more of the symptoms.

IT pays to make your medicine as palatable as you can without sacrificing its actual merit.

FAVORITE PRESCRIPTIONS

APHONIA AND HOARSENESS.—

℞ Potass. bichromat..... gr. i-iij
Aq ..... ℥iv

M. S. A teaspoonful every two or three hours.

SCABIES.

℞ Hydrarg. precip. alb..... gr. x
Lanolin..... ℥ij
Ungt. zinc oxid..... ℥iij
Ungt. aq. rosae..... ℥iij
Balsam Peru..... ℥ss

M. S.: Apply twice daily.

GONORRHEA.—

℞ Balsam copaiba .....
Spts. nitre.....aa ℥ss
Syr. acaciae.....
Syr. simplex.....aa ℥ij
Spts. lavand. comp..... ℥i

M. Ft. emulsion.

INCONTINENCE OF URINE.—Dr. White's formula is:

℞ Sodium benzoate.....
Sodium salicylate. .....aa gr. xv
Ext. belladonna..... gr. xxx
Cinnamon water..... ℥iv

M. Sig.: A teaspoonful four or five times a day.

NERVOUSNESS AND GENERAL MALAISE.—Especially recommended at the period of the menopause:

℞ Ammonnii bromidi..... ℥ij
Sodii bromidi..... ℥iv
Spt. ammonii aromat ..... ℥vj
Aqua camphor..... ℥vj

M. Sig.: Tablespoonful every four hours. —Dr. Parvin.

DRY ECZEMATOUS ERUPTIONS ON THE FACE. —The Bulletin general de therapeutique (October 15, 1907) gives the following formulae for eruptions on the face:

℞ Sodium borate..... 0.50 gramme
Tincture of benzoid .... gtt. xv
Zincoxide ..... 2.0 grammes
Petrolatum.....18.0 grammes

M. S.: Apply at night, in a thin layer, to the affected area.

The following is more delicate:

℞ Tannin ..... 2.0 grammes
Calomel..... 1.0 gramme
Glycerite of starch..... 30.0 grammes

M. S.: To be applied each night.

LUMBAGO.—

℞ Sodii salicylat,..... ℥ss
Potassii iodidi..... ℥ij
Syr. sarsaparillae comp..... ℥iss
Aq., q. s..... ℥ij

M. Sig.: A teaspoonful in water after meals.—Cohen, Med. Rec.

MEDICAL MISCELLANY

THE medical association of the district of Palermo, in Italy, have taken the initiative in refusing their services to duelists. They think that the inability to obtain a physician may help to deter would-be duelists, and arouse an agitation against dueling in general.

PROFESSOR AUGUST BIER, whose method of treament of various inflammatory conditions by induced passive hyperemia, has been appointed to fill the chair of the late Ernst von Bergman in Berlin. Aside from the Bier passive congestion treatment, Dr. Bier gave to medicine a most important discovery in spinal anesthesia.

LOW BIRTH RATE IN FRANCE.—According to statistics published by the official journal of the republic, the birth rate in France for the year 1906 was the lowest that history records. There has been a steady decline in the number of births for a number of years. The average yearly rate from 1896 to 1905 was 839,843, and in 1906 the number of births fell to 806,847, while the deaths during the year aggregated 780,196.

THE NEW COLOR-PHOTOGRAPHY.—The leading article of the January Century will be devoted to the new color-photography, the difficulties overcome, and its possibilities. "It will prove an invaluable aid to the accurate study of diseases, notably skin diseases; and it will make possible art lectures illustrated with absolute facsimiles of the paintings discussed, by means of lantern slides; and for the first time indisputably authentic family portraits can be produced of a beauty and veracity surpassing the most delicate and masterly miniature." There will be two pages in color—the first reproductions in color made in America from such originals—showing results accomplished by Mr. Steichen in Paris.

THE CHILD-RESCUE CAMPAIGN.—The editor of the Delineator has started a worthy campaign in finding suitable homes for children and suitable children for homes. Many bright and beautiful children are born into this world with seemingly only one parent. Many of these so-called love children have been among the most brilliant men and women the world has ever known. Whether the child has one parent or two, or whether the child has none, it is still a human being with mind and body capable of doing much good in this world or of doing much that is wicked. A child properly brought up, properly educated, physically, morally and mentally, irrespective of parentage, may be developed into a useful member of society.